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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/443,712

11/19/1999

DAVID MICHAEL SPRAGUE

1322/8

7620

25297

7590

03/14/2003

JENKINS & WILSON, PA
3100 TOWER BLVD
SUITE 1400
DURHAM, NC 27707

EXAMINER

LEE, TIMOTHY L

ART UNIT

PAPER NUMBER

2697

DATE MAILED: 03/14/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/443,712

Applicant(s)

SPRAGUE ET AL.

Examiner

Timothy Lee

Art Unit

2697

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 and 48-57 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-10 and 48-57 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 November 1999 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2-11.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 2, 5, 10, 48, 49, 52, and 57 are rejected under 35 U.S.C. 102(e) as being anticipated by Curry et al. (US 5,923,659). Curry et al. discloses a system and method for controlling on a worldwide bases two or more telecommunications networks which are themselves capable of exercising a form of common channel signaling network control. In Fig. 12, Curry et al. discloses the receiving of an SS7 packet message at an STP (receiving at a first STP a first SS7 user part message). When the STP recognizes that a foreign prefix exists, it directs the packet to the Internet Module, where the Module performs the necessary address determination and adds the appropriate addressing and instructional overhead to encapsulate the packet in one or more TCP/IP packets, and transmits the packet over the Internet (encapsulating the SS7 user part message in a first IP packet; transmitting the IP packet to a second SS7 signaling point over an IP network; IP packet includes adding a TCP header). See Fig. 12, and col. 21, lines 12-50.
3. Regarding claims 5 and 52, Curry et al. does not mention termination user part layer communications (transmitting the first IP packet without terminating user part layer communications).

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4. Regarding claims 10 and 57, Curry et al. describes sending the packet over foreign lands, so this would indicate that the message is being transmitted to and from different local areas, and therefore, classify as an E link between the first STP and the SSP.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 3 and 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Curry et al. The rejection for claims 1 and 48 also stand in this rejection. Curry et al. does not expressly disclose adding a UDP header on the SS7 user part message, but it would have been obvious to do this. One would have been motivated to do this because Curry et al. discloses adding a TCP header, and UDP and TCP are very similar protocols and both work on the same layer—having the capabilities to add TCP would have also allowed UDP to be added.

7. Claims 4 and 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Curry et al. in view of Schrodi et al. (US 5,173,897). The rejection for claims 1 and 48 also stand in this rejection. Curry et al. does not expressly disclose including an application-level sequence number to the SS7 user part message. Schrodi et al. discloses adding a sequence number to ATM cells in transmission. See col. 1, lines 34-47. It would have been obvious to a person of ordinary skill in the art at the time of the invention to add sequence numbers to the SS7 user messages. One of ordinary skill in the art would have been motivated to do this because adding

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sequence numbers ensures that the all of the message part are transmitted properly and are accounted for.

8. Claims 6-9 and 53-56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Curry et al. in view of Valentine et al. (US 6,328,267). The rejection for claims 1 and 48 also stand in this rejection. Curry et al. does not expressly disclose a network setup that would include A links, B links, C links, or D links in SS7 networks. Valentine et al. discloses that all of those link types can exist from A through F and depicts the different links in Fig. 1. See also col. 5, line 47-col. 6, line 8. It would have been obvious to a person of ordinary skill in the art at the time of the invention to be able to send the IP packets disclosed in Curry et al. over the A through D links disclosed in Valentine et al. One of ordinary skill in the art would have been motivated to do this because Curry et al. already disclosed it was possible to send it through the message through an E link—the links are all very similar, but they have slightly different structures and purposes, so adapting the technique used for the E link to the other links should be possible.

Remarks

9. Examiner acknowledges Applicants' submittal that Group IV should have included claim 26-31 and 72-78. Examiner also acknowledges that the claim 25 should be included in Group IV only and not in Group III.

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Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Autrey et al. (US 5,774,695), Spangler et al. (US 6,327,350), Lindren et al. (US 6,411,632) and Glitho (US 6,178,181) disclose sending SS7 messages in IP networks.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy Lee whose telephone number is (703)305-7349. The examiner can normally be reached on M-F, 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on (703)305-4789. The fax phone numbers for the organization where this application or proceeding is assigned are (703)746-9420 for regular communications and (703)746-9420 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-4700.

TLL
February 27, 2003


RICKY NGO
PRIMARY EXAMINER